

## **Product Evaluation**

RC512 | 1116

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** RC-512 **Effective Date:** November 1, 2016

**Re-evaluation Date:** November 2020

**Product Name:** SR 150 Snap Lock 24-Gauge Steel Roofing Panels Installed Over a Plywood Deck

**Manufacturer:** Strata Roofing & Construction

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## **General Description:**

The SR 150 Snap Lock metal roofing panel is a minimum 24-gauge galvalume steel panel with optional paint finishes. The 1-1/2" snap lock metal roofing panels have a maximum coverage of 16-5/8". The panel has a 1-1/2" tall snap lock rib. The 24-gauge steel conforms to ASTM A 792 AZ55, Grade 50, with a minimum 50 ksi yield point. Panel Rollformer by New Tech Machinery, Corp.

## **Limitations:**

**Roof Decking:** The SR 150 Snap Lock metal roofing panels must be installed over a minimum 15/32" plywood roof deck. A thicker roof deck may be used; however, the design pressure rating for the roofing panels will be as specified in this evaluation report.

**New Roof Deck Attachment:** The roof deck must meet or exceed the uplift requirements of the IRC or the IBC and must be installed as required for resistance to wind loads.

**Roof Slope:** The metal roofing panels must not be installed on roofs with a roof slope less than 3:12.

**Design Wind Pressures:** The design pressure uplift load resistance must be as specified in Table 1.

**Table 1:**Attachment of SR 150 Snap Lock minimum 24-gauge steel roofing panels to minimum 15/32" plywood deck

| Design Pressure | Panel Gauge  | Panel Clip Fasteners       | Clip Spacing  |
|-----------------|--------------|----------------------------|---------------|
| -52.5 psf       | 24 Ga. Steel | #10-12 x 1" Pancake Type A | 18" on center |
| -86.0 psf       | 24 Ga. Steel | #10-12 x 1" Pancake Type A | 6" on center  |

**Installation over an Existing Roof Covering:** Installation over an existing roof covering is limited to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing, or roll roofing applied over an existing, solid roof deck of minimum 15/32" plywood. Note: Inspection of the existing roof deck must be made prior to the installation of the roof panels. The condition of the existing roof deck must be acceptable to receive the metal roofing panels before the metal roofing panel installation proceeds. NOTE: Underlayment is not required to be installed.

## **Installation Instructions:**

**General:** The SR 150 Snap Lock metal roofing panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

**Panels:** The metal roofing panels must be secured to the roof covering as specified in Table 1 and in accordance with this section.

**Underlayment:** A minimum of one layer of No. 30 (Type II) asphalt felt or equivalent must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed with minimum 2" side laps and 2" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instruction. Fasteners must be applied along the overlaps not farther apart than 36" on center.

**Attachment of Metal Roof Panels to the Roof Deck:** The metal roofing panels must be secured to the roof deck as follows:

**Roofing Panels:** The panels must be installed using two, #10-12 x 1" long Pancake Type A fasteners with 24-gauge, 1.75" long x 1.55" wide x 1.25" high galvanized steel fixed clips (SG-114-24 by Logan Stamping, Inc.). The fasteners must be long enough to ensure a minimum penetration of 1/4" below the roof deck. (Note: If the metal roofing panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to ensure a minimum penetration of 1/4" below the existing plywood roof decking.) The spacing of the clips along the length of the panels must be as specified in Table 1.

**Panel Ends and Edges:** As required by the manufacturer.

**Trims, Closures, and Accessories:** Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim must be installed as required by the manufacturer.

**Note:** Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.